

IN THE CLAIMS:

Claims 1-26 (Canceled)

Claim 27 (Previously presented) In an electrochemical cell comprising a casing; an anode; a solid cathode having as active material a material selected from the group of materials consisting of metal oxide bronzes and carbon monofluoride; and an ionically conductive electrolyte solution, which is operatively associated with said anode and cathode, comprising a lithium salt and an organic solvent, wherein the improvement comprises a combination of components rendering the electrochemical cell autoclavable and dimensionally and chemically stable during repeated prolonged exposures to heat of from about 130 °C, said combination comprising:

- an anode having as active material a material which has a melting point greater than 150°C and which is selected from groups IA and IIA of the Periodic Table; and
- a mixed electrolytic organic solvent having a boiling point greater than about 100°C and a dielectric constant greater than about 5 selected from the group consisting of sulfolane, ethylene carbonate, propylene carbonate and gammabutyrolactone.